

# VITAE

John J. Ball



## EDUCATION AND EXPERIENCE

Michigan State University, East Lansing, Michigan

Degree: Ph.D. (Forestry), 1982

Specialization: Forest Entomology, Computer Science

Dissertation Title: Physiological condition of European white birch (*Betula pendula* Roth) and its relationship to birch dieback and bronze birch borer (*Agrilus anxius* Gory) behavior and development.

Michigan State University, East Lansing, Michigan

Degree: M.S. (Forestry), 1979

Specialization: Forestry Entomology, Pathology

Dissertation Title: Interactions of bronze birch borer (*Agrilus anxius* Gory) and European white birch (*Betula pendula* Roth) populations in urban environments.

Michigan Technological University, Houghton, Michigan

Degree: B.S. with honors (Forestry), 1975

Specialization: Forest Management, Urban Forestry

## PROFESSIONAL CERTIFICATION

International Society of Arboriculture Board Certified Master Arborist

National Registry Advanced Emergency Medical Technician

Society of American Forester Certified Forester and Fellow

Tree Care Industry Association TreeCare Safety Professional

## PROFESSIONAL EXPERIENCE

Teaching and Research

1999 - present Professor of Forestry, Agronomy, Horticulture and Plant Science Department, South Dakota State University, Brookings, South Dakota / Forest Health Specialist, South Dakota Division of Resource Conservation and Forestry, Pierre, South Dakota

Current position is 50% teaching, courses include landscape

maintenance, arboriculture, nursery management, and forest ecology and management among others; 50% outreach as the South Dakota Division of Resource Conservation and Forestry's forest health specialist. As part of these duties I conduct the line clearance and arborist safety program for South Dakota as well as the surrounding states. I also assisted in a national program funded by OSHA to improve the safety in the tree care industry and maintain an active research program in this field.

- 1991- 1999 Assistant / Associate Professor of Forestry, Horticulture, Forestry, Landscape and Parks Department, South Dakota State University, Brookings, South Dakota / Urban Forestry Coordinator, South Dakota Division of Forestry, Pierre, South Dakota / Campus horticulturist, South Dakota State University
- 1989 - 1991 Extension Instructor, Horticulture, Duluth Technical College, Duluth, Minnesota
- 1989 - 1991 Instructor, Computer Science Department, Duluth Community College, Duluth, Minnesota
- 1988 - 1989 Instructor, Horticulture, Evening College Division, Endicott College, Beverly, Massachusetts
- 1983 - 1986 Assistant Professor, Horticultural Technology Division, University of Minnesota, Waseca, Minnesota
- 1984 - 1987 Adjunct Professor, Department of Forestry, University of Minnesota, St. Paul, Minnesota
- 1986 - 1987 Instructor, Statistics, Rasmussen Business College, Mankato, Minnesota
- 1976 - 1983 Horticulture Instructor, Agriculture Department, Western Michigan University, Kalamazoo, Michigan
- 1978 - 1982 Research Assistant, Department of Entomology, Michigan State University, East Lansing, Michigan
- 1981 Instructor, Department of Entomology, Michigan State University, East Lansing, Michigan
- 1979 Instructor, Applied Technology Department, Lansing Community College, Lansing, Michigan

1977 - 1979 Teaching Assistant, Department of Forestry, Michigan State University, East Lansing, Michigan

## **Business**

1989 - 1991 Manager - Tree Care and Landscaping Division, Arrowhead Tree Service, Duluth, Minnesota

1988 - 1989 Director of Plant Health Care, Carpenter-Costin, Inc., Swampscott, Massachusetts

1974 -1983 Garden Center Sales, Wedel's Garden Center, Kalamazoo, Michigan

1975 - 1977 Ornamental Horticulturist, G. J. Ball Company, Burgess Division, Galesburg, Michigan

## **SCHOLARLY ACTIVITIES**

### **Journal Articles**

Ball, J. and C. Taecker 2013. Survival of Mountain Pine Beetle in Unpeeled Logs. *Western Journal of Applied Forestry* 28: 154-157.

Ball, J. and S. Vosberg. 2010. Tree Worker Safety: A Survey of United States Tree Care Companies: Part I – Safety Training and Fatal Accidents. *Arboriculture & Urban Forestry* 36:224-229.

Ball, J. S. Mason, A. Kiesz, D. McCormick and G. Brown. 2007. Assessing the Hazard of Emerald Ash Borer and Other Exotic Stressors to Community Forests. *Arboriculture & Urban Forestry* 33: 350-359.

Ball, J. 2002. Problems associated with the establishment of street trees in the United States, pp 169 – 173. In Yu Haiyan (ed) *Research on International Social Forestry*, China Forestry Publishing, Beijing, P.R. China

Ball, J. 2001. Management needs of the remnant and emergent urban forests in the United States, pp 118 – 125. In Yu Haiyan (ed) *Research on International Social Forestry*, China Forestry Publishing, Beijing, P.R. China

Ball, J and P. Schaefer. 2000. Case no. 1: 100 years of forest management. *J. Forestry* 98: 4-10.

Walla, J.A., W.R. Jacobi, N.A. Tisserat, M.O. Harrell, J.J. Ball, G.B. Neill, D.A. Reynard, Y.H. Guo and L. Speigle. 2000. Detection of the ash yellows phytoplasma in the Great Plains and eastern Rocky Mountain regions of North America. *Plant Disease* 84 (3): 268- 270.

- Ball, J., J. Lloyd and D. Marion. 1999. The appropriate response process (ARP) and its role in plant health care. *J. Arboricult.* 25: 24-30.
- Ball, J. 1997. On the urban edge: a new and enhanced role for foresters. *J. Forestry* 95: 6-10.
- Ball, J. and M. McLeod. 1997. Role of stress in predisposing trees to insect colonization: implications for plant health care. *J. Environ. Hort.* 15: 164-168.
- Ball, J. 1994. Plant health care and the public. *J. Arboricult.* 20:33-37.
- Ball, J. 1992. Response of the bronze birch borer to pruning wounds. *J. Arboricult.* 18:294-297.
- Ball, J. 1992. Marketing arboricultural services. *J. Arboricult.* 18:205-208.
- Ball, J. and P. Marsan. 1991. Establishing monitoring routines and action thresholds for a landscape IPM service. *J. Arboricult.* 17:88-93.
- Ball, J. 1988. The use of electric chain saws in arboricultural education. *J. Arboricult.* 14:145-147.
- Ball, J. 1987. Influence of fall planting dates on the survival and growth of *Taxus media* 'Tauntonii', *Thuja occidentalis* 'Techny' and *Viburnum trilobum*. *Hort. Sci.* 22:1289-1290.
- Ball, J. 1987. Efficient monitoring for an urban IPM program. *J. Arboricult.* 13:174-177.
- Ball, J. 1986. A nursery simulation game. *NACTA Journal.* 30(3):31.
- Ball, J. 1986. Microcomputer simulation of plant growth. *NACTA Journal.* 30(2):38-40.
- Ball, J. 1986. Urban forestry and volunteer management. *J. Arboricult.* 12:182-184.
- Ball, J. 1986. Public perception of an integrated pest management program. *J. Arboricult.* 12:135-140.
- Ball, J. and G. Simmons. 1986. The influence of host condition on post first-instar development of the bronze birch borer. *Great Lakes Entomol.* 19(2):73-76.
- Ball, J. and G. Simmons. 1985. The shigometer as predictor of bronze birch borer

risk. *J. Arboricult.* 10:327-329.

Ball, J. and G. Simmons. 1985. Guidelines for using homeowner's trees in urban research. *J. Arboricult.* 10:330-331.

Ball, J. and G. Simmons. 1984. Detection of bronze birch borer larvae and pupae by radiographs. *Great Lakes Entomol.* 17(4):223-224.

Ball, J. 1984. Species and spatial analyses of birch dieback in urban areas *J. Minn. Academy of Science* 50(2):16.

Ball, J. and G. Simmons. 1980. The relationship between bronze birch borer and birch dieback. *J. Arboricult.* 6:309-314.

Simmons, G. A., J. Mahar, M. K. Kennedy and J. Ball. 1977. Preliminary test of prescribed burning for control of maple leafminer (Lepidoptera: Incurvariidae). *Great Lakes Entomol.* 10:209-210.

## **Books**

Ball, J. and M. Johnson. 2016. *Arborist First Responder Field Guide*. Tree Care Industry Association. Londonderry, NH. 93 pg.

Ball, J. 2013. *Trees! The Fruit, Nut, Ornamental, Shade and Windbreak Trees for the Northern Plains*. South Dakota State University, Brookings, SD. 494 pp.

## **Book Chapters**

Ball, J., D. Williams and P. Weicherding. 1997. Planting and maintenance of woody ornamental plants. **In** Lloyd, J. (ed.) *Plant Health Care for Woody Ornamentals*. University of Illinois, Urbana, IL.

Ball, J. 1995. PHC marketing: pricing and programs. **In** Wadley, T.L. (ed.) *A Guide to the Plant Health Care Management System*, 2nd Edition. International Society of Arboriculture, Savory, IL, pp 51-58.

Ball, J. 1995. PHC and the landscape design/build process. **In** Wadley, T.L. (ed.) *A Guide to the Plant Health Care Management System*, 2nd edition. International Society of Arboriculture, Savory, IL, pp 141-148.

Ball, J. 1992. Tree selection. **In** Johnson, D. (ed.) *Landscape Gardening*. Voyageur Press, Stillwater, MN, pp 23-26.

Ball, J. 1991. Successful tree planting. **In** Johnson, D (ed.) *The Good Gardener*. Voyageur Press, Stillwater, MN, pp 45-48.

Lambur, M., B. Parks, J. Ball, G. Simmons and F. Fear. 1981. *Pest Management Manual*. Project Pest Publ. Departments of Resource Development, Entomology, and Forestry. Michigan State University.

### **Proceedings**

Ball, J. 1998. Forest fragmentation and urban development. Proc. 1<sup>st</sup> International Social Forestry Conference, Chinese Academy of Forestry, Beijing, P.R. China, 156 pp.

Ball, J., M.J. McLeod, A. Fennell, and D. Graper. 1993. Tree health management: a conceptual framework. Proc. Stress Symposia: Mechanisms, Response, Management, South Dakota State University, Brookings, SD. 236 pp.

Ball, J. 1987. Urban tree care. Proc. Woodland Owners and Users Conference. Department of Forest Resources, University of Minnesota, St. Paul, Minnesota. 80 pp.

Ball, J. 1986. The Development of a Nursery Simulation Game. Proc. Forestry Microcomputer Software Symposium, West Virginia University, Morgantown, W.V. 747 pp.

Ball, J. and G. Simmons. 1980. The bronze birch borer. Proc. Soc. Amer. Foresters. Wisc-Mich. Sec. 27-31.

### **Technical and Popular Publications**

Ball, J. 2016. Chain saw safety. *Southwestern Arboriculture* 16 (1): 15-16.

Ball, J. 2016. Safety update: may the force NOT be with you. *Tree Care Industry* 27 (3): 50-53

Ball, J. 2016. Falls from trees; when you are part of the energy system. *Tree Care Industry* 27 (5): 34-36

Ball, J. 2016. How much does a tree weigh? *Tree Care Industry* 27(9): 12-15.

Ball, J and S. Kyo. 2016. Diversity of the urban forest. *Arborist News* 25 (5): 48-52

Ball, J. 2015. OSHA first aid kit requirements. *Arborist News* 24(5): 16-18.

Ball, J. 2014. Tree worker incidents: Its Déjà vu all over again. *Tree Care Industry* 25(1): 8-11.

- Ball, J. 2014. The Ten Commandments for tree workers. *Tree Care Industry* 25(4): 30-32.
- Ball, J. 2014. What's in your first aid kit? *Tree Care Industry* 25 (3): 12-15
- Ball, J. 2014. No substitutions for specifications. *American Nurseryman* 110(10): 18-22
- Ball, J. and T. Walsh. 2014. The law of unintended consequences and tree worker safety. *Tree Care Industry* 25(8): 42-45.
- Ball, J. 2013. Aerial Rescue: Don't Focus Your Training on Only One Possibility *Landsculptor* 16 (7): 37-38
- Ball, J. 2013. Climate Change and Pests. *Landsculptor* 16 (2): 37-39.
- Ball, J. 2013. The Collegiate Arboricultural and Advancement Committee: Working to Promote Arboricultural, Landscape Management and Urban Forestry Programs. AREA quarterly newsletter spring 2013: 2
- Ball, J. 2012. The Matrix: It's not just a Movie, but a Safety Tool. *Tree Care Industry* 23(2): 36–40.
- Ball, J. 2012. Tree Work is not for the Amateur. *Tree Care Industry* 23(5): 36-38.
- Ball, J. 2012. First Aid: What's best in CPR – ABC or CAB, hands-only or Conventional? *Tree Care Industry* 23(7): 20-22.
- Ball, J. 2012. Tree Worker Safety. *Landscape Contractor* Winter 12/13: 21-23.
- Ball, J. 2012. Teaching Moment. *Arborist News* 21 (6): 26-28
- Ball, J. 2011. A New Threat to Michigan Forests: Thousand Cankers Disease. *Landsculptor* 14(2): 49-51
- Ball, J. 2011. Trauma: Incident + 20 Seconds. You're Alive but will You Survive. *Tree Care Industry* 22(7): 32-35.
- Ball, J. 2011. "Flying" an Aerial Lift Requires Special Care. *Tree Care Industry* 22(9): 22-24.
- Ball, J and C. Taecker. 2011. A Little Less Salt Please. *Prairie Gardener* 12 (10): 12-14

- Ball, J. 2010. Tree Diagnostics – Its' Not CSI. *Australian Arbor Age* 14(6): 6-8
- Ball, J. 2010. Ground Worker Accidents. *Tree Care Industry* 21(3): 8-10.
- Ball, J. and D. Blair 2010. Preventing Chain Saw Injuries. *Arborist News* 19(5): 12-15.
- Ball, J. 2009. Tree Work is not for the Amateur. *The Landsculptor* 14(11): 39-40
- Ball, J. 2009. What's the Right Thing to do? *Colorado Green* 25(5) 22-26.
- Ball, J, 2009. Trends in Tree Worker Accidents. *Tree Care Industry* 20(10): 10-14.
- Ball, J. 2009. Aerial Rescue Workshops should Cover Everyday Scenarios. *Tree Care Industry* 20(12): 26-28
- Ball, J. and D. Blair 2009. Chipper Accident: They are more common than Reported. *Tree Care Industry* 20(4): 8-13.
- Kezar, S and J. Ball. 2009. Victim Centered Care: Aerial Rescue Concept. *Tree Care Industry* 20(4): 24-26.
- Ball, J and S. Vosberg. 2008. The Teachable Moment. *Arborist News* 17(5): 50-51.
- Ball, J. 2008. Diagnostics: It is About the Client and the Tree. *The Landsculptor* 13(2): 51-55.
- Ball, J, 2008. Anatomy of an Accident. *Tree Care Industry* 19(4): 32-35.
- Ball, J. 2008. The Fundamentals of Diagnostics. *Australian Arbor Age* 13(2): 8-10.
- Ball, J. 2008. Aerial Rescue: Do our Procedures Match the Needs? *Australian Arbor Age* 13(1): 10-12.
- Ball, J. 2007. Tree Worker Safety: The Accidents That Occur and How We Need to Respond to Them. *The Landsculptor* 12 (2): 53-56
- Ball, J, 2007. Safety in the Tree Care Industry: It is About Changing Behavior. *Tree Care Industry* 18(4): 84-86.
- Ball, J. 2007. Tree Worker Safety: It is a Global Issue. *Australian Arbor Age* 12(3): 20-23.



- Ball, J. 2007. The Role of Pruning in Tree Care. *Australian Arbor Age* 12(2): 42-45.
- Ball, J. and S. Lundvall. 2007. Overcrowding Landscapes. *American Nurseryman* 206(3): 31-37.
- Ball, J. 2006. Pruning with Confidence. *Fine Gardening* 110: 61-65
- Ball, J, S. Kezar and S. Vosberg. 2006. Lessons learned from accident research. *Tree Care Industry* 17(8): 68-73.
- Ball, J, S. Kezar and K. Palmer. 2006. The complexities of aerial rescue. *Arborist News* 15(5): 26-27.
- Ball, J. 2005. Pruning Mature Trees. *City Trees* 41(2): 12-15.
- Ball, J. 2005. Safety and Pruning. *SGA Today* 9(1): 1-3.
- Ball, J. 2005. Palms: Not Just for the Tropics. *Arborist News* 14(1): 13-17.
- Ball, J and S. Vosberg. 2005. Tree Worker Safety: A View from the Past. *Arborist News* 14(2): 14-18.
- Ball, J. 2004. Room to breathe. *Grounds Maintenance* 39(11): 2-8.
- Ball, J. 2004. Accidents in arboriculture: what's happening and why. *Tree Care Industry* 15(9): 68-72.
- Ball, J. and N. Evers. 2004. The roots of landscape success. *Amer. Nurseryman* 199(9): 57-61.
- Ball, J., S. Vosberg and T. Walsh. 2004. ANSI: it's about saving lives. *Arborist News* 13(4): 35-40.
- Ball, J. and S. Vosberg. 2004. Tree worker safety: which accidents occur in our industry. *Arborist News* 13(2): 25-27.
- Ball, J. and D. Mekkes. 2003. Tree Worker Safety. *City Trees* 39(5) 9-11.
- Ball, J. and D. Mekkes. 2003. The aerial environment: high heights and high risks. *SGA Today* 12(6):2-5.
- Ball, J. and S. Vosberg. 2003. How accidents happen and why. *Tree Care Industry* 14(8): 50-53.

- Ball, J. 2003. Arboreal schizophrenia: the root of the problem *Arborist News* 12(6): 33-32.
- Ball, J. 2003. The role of thinning in plant health care. *Arborist News* 12 (1): 12-15.
- Ball, J. 2002. Better safe than sorry. *Amer. Nurseryman* 195(7): 46-49.
- Ball, J. and A. Wiechmann. 2002. Aerial rescue: are our current practices safe? *Arborist News* 11(1):13-15.
- Ball, J. 2001. IPM in the real world. *Tree Care Industry* 12 (4): 8-14.
- Ball, J. 2001. Don't put off pruning. *Lawn & Landscape* 22(8): 14-16.
- Ball, J. and N. Evers. 2001. Learning from our mistakes. *American Nurseryman* 194 (5): 30-34.
- Ball, J. 2001. The price is right. *American Nurseryman* 194 (7): 36-39.
- Ball, J. 2001. Falls: the greatest risk to arborist. *Arborist News* 10 (6): 14-15.
- Ball, J. and T. Konda. 2000. Cobra tree support systems. *Tree Care Industry* 11(3): 8-11.
- Ball, J. 2000. Nutrients and fertilization. *Arbor Age* 20(3): 31-33.
- Ball, J. and T. Konda. 2000. Staking your claim. *American Nurseryman* 192 (3): 66-68.
- Ball, J. 2000. Prescription fertilizing. *Ground Maintenance* 35(9): 40-42,46.
- Ball, J. 2000. Managing the feature tree. *Arborist News* 9(2): 55-58.
- Ball, J. and J. Cornforth. 2000. Saving forests in urban development, not trees. *Virginia Forests* 56 (3): 6-7.
- Ball, J. 1999. Going, going, gone: diagnosing tree decline. *Grounds Maintenance* 34(9): 33 –39.
- Ball, J. 1999. A brief history of arboricultural pest management: part II. *Arborist News* 8(3): 9-11.
- Ball, J. 1999. A brief history of arboricultural pest management: part I. *Arborist*

*News* 8(1): 29-33.

Ball, J. 1999. Managing foliar fungal diseases: timing is everything. *Grounds Maintenance* 34(3): 62-68.

Ball, J. 1999. Planting: the foundation of plant health care. *Arborist News* 8(1): 23-26.

Ball, J. 1998. Going to market. *Amer. Nurseryman* 188 (10): 28-32.

Ball, J. 1997. Plant health care: a new direction for the care of landscape plants. *Lawn and Landscape* 18(3): 15-18.

Ball, J. 1997. Shady characters. *Golf Course Management* 28(11): 40-46, 72-74.

Ball, J. and J. Lloyd. 1997. Plant health care and the diagnostic process. *Arborist News* 6(5): 45-48.

Lloyd, J. and J. Ball. 1997. Plant health care. *Arborist News* 6(4): 41-45.

Ball, J. 1995. Tree hazards: what you don't know can hurt you. *Amer. Nurseryman* 182 (3): 58-64.

Ball, J. 1995. Plant health care: a new approach to tree care. *Horticulture Weekly* (British publication) 110(3): 2-5.

Ball, J. 1994. The business of plant health care. National Landscape Association Landscape 'How To' Bulletin 1(6): 1-4.

Ball, J. and M. McLeod. 1994. Staying on target. *Lawn and Landscape* 15(12): 65-68.

Ball, J. 1994. Lush landscapes. *Amer. Nurseryman* 180(10): 54-61.

Ball, J. 1994. The status of plant health care in the tree care industry. *Arborist News* 3(3):12-15.

Ball, J. 1994. Marketing a plant health care program. *Shade Tree Leaves* 2:3,8-9.

Ball, J. 1992. Landscape guarantees: a new approach. *Amer. Nurseryman*. 175(7): 19-25.

Ball, J. 1991. Keeping good employees. *Amer. Nurseryman*. 174(10): 85-87.

Ball, J. 1991. Oak, the true Minnesota state tree. *Minnesota Horticulturists*.

119(7): 15-17.

Ball, J. 1990. In-sights on-site tree preservation. *Amer. Nurseryman*. 172(9):93-95, 98-111.

Ball, J. 1990. Initiating IPM into your landscape program. *Lawn and Landscape Maintenance*. 11(4): 68-70.

Ball, J. 1989. Help! Insects are eating my tree! *Minnesota Horticulturists*. 117(7): 7-9.

Ball, J. and P. Marsan. 1989. Customer satisfaction and IPM. *Arbor Age*. 9(5): 20, 22, 23, 25.

Ball, J. and P. Marsan. 1989. SAS or IPM? Which direction for your company? *Arbor Age*. 9(2): 12-14.

Ball, J. 1989. How to hire an IPM service. *Minnesota Horticulturists*. 117(1): 8-9.

Ball, J. 1988. Roots, air and tree health. *Arbor Age*. 8(10): 10, 11, 14.

Ball, J. 1988. Silent Spring: 25 years later. *Northeast Quarterly* 10(4):12.

Ball, J. 1988. Tree spade transplanting and growth of Amur maple. *Amer. Nurseryman*. 167(7): 118.

Ball, J. 1987. Selecting a Christmas tree. *Minnesota Horticulturist*. 115(9): 5-7.

Ball, J. 1987. Technical arboricultural education. *Arbor Age*. 7(8): 16, 18.

Ball, J. 1987. Successful tree planting. *Minnesota Horticulturist*. 115(5): 132-133, 154.

Ball, J. 1987. Do mature trees need attention? *Amer. Nurseryman*. 165(1): 143-145.

Ball, J. 1986. Winterizing the landscape. *Minnesota Horticulturists*. 114(8): 235.

Ball, J. 1986. Trees for the discriminating planter. *Minnesota Horticulturists*. 114(2): 54, 55.

Ball, J. and B. Pedersen. 1986. Trees for Minnesota golf courses. *Minnesota Golf Course Superintendents Association Hole Notes*. 15(1): 3, 4.

Ball, J. and C. Thompson. 1986. St. Johnsworts as ornamental shrubs in

Minnesota. *Bulletin of the Woody Plant Society*. 3(2): 5-17.

Ball, J. 1985. Tree health care. *Minnesota Horticulturists*. 113(5): 134, 141.

Ball, J. 1985. Use of microcomputer simulations in teaching biological concepts. *Transfer*. 1:14-15.

Ball, J. and R. Kisor. 1985. Acid scarification requirements of south-central Minnesota Kentucky coffeetree seed. *Tree Planters' Notes*. 36(2): 23.

Ball, J. 1984. Minnesota firewood trees. *Minnesota Horticulturists*. 112(9): 263, 288.

Ball, J. 1984. Growth rates of 20 common Minnesota landscape plants. *Bulletin of the Woody Plant Society*. 1(2): 10-12.

Ball, J. 1984. Managing birch dieback. *Minnesota Horticulturists*. 112(7): 199, 212.

Ball, J. and T. Spencer. 1984. Golf course tree management. *Minnesota Golf Course Superintendents Association Hole Notes*. 13(6): 9, 11, 13.

Ball, J. and B. Pedersen. 1984. Horticulture at the University of Minnesota Technical College, Waseca. *North Central Nurseryman*. 6(4): 14-15.

### **Extension and Outreach Publications**

Ball, J. 2016. *Environmental Stress*, pp. 4-11. In Bergdahl, A. (tech. coord). *Diseases of Trees in the Great Plains*. Gen. Tech. Rep 355. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Ball, J. 2016. *Powdery Mildew of Lilacs*, pp. 48-50. In Bergdahl, A. (tech. coord). *Diseases of Trees in the Great Plains*. Gen. Tech. Rep.355. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Ball, J and J. Walla. 2016. *Brown Rot of Stone Fruits*, pp. 64-66. In Bergdahl, A. (tech. coord). *Diseases of Trees in the Great Plains*. Gen. Tech. Rep. 355. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Jacobi, W. and J. Ball. 2016. *Wetwood and Slime Flux in Hardwoods*, pp120-123. In Bergdahl, A. (tech. coord). *Diseases of Trees in the Great Plains*. Gen.

Tech. Rep. 355 USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Ball, J. 2005 Forestry Best Management Practices in South Dakota. South Dakota Department of Environment and Natural Resource. 22 pp.

Katovich, S.A., A.S. Munson, J. Ball and D. McCullough. 2001. Bronze Birch Borer. USDA Forest Service Forest Insect and Disease Leaflet 111. 4pp.

Ball, J., J. McMillin, and K. Allen. 2001. Test of carbaryl and permethrin for prevention of attack by mountain pine beetle in the Black Hills of South Dakota. USDA Forest Service R2-01-04.

Ball, J., D. Graper and C. Wake. 2000. *Shrubs for South Dakota*. SDSU Extension Circular 904.

Ball, J. and D. Graper. 1999. Deciduous shrub pruning. SDSU Extension Extra, ExEx 6034.

Ball, J. and D. Graper. 1999. Hedge shearing. SDSU Extension Extra, ExEx 6033.

Ball, J. and D. Graper. 1995. Trees for South Dakota. SDSU Extension Circular 903.

Ball, J., D. Gilbertson, and D. Graper. 1994. Guidelines for professional tree and shrub appraisal in South Dakota. SDSU Extension Extra, ExEx 6029.

Ball, J. and D. Graper. 1993. What to do about flood-damaged trees. SDSU Extension Extra, ExEx 6025.

Ball, J. and D. Graper. 1993. Chlorosis (yellowing) of shade tree leaves. SDSU Extension Extra, ExEx 6026.

Ball, J. and D. Graper. 1993. Fertilizing landscape trees and shrubs. SDSU Extension Extra, ExEx 6027.

Ball, J. and D. Graper, 1993. Planting a tree with a tree moving machine. SDSU Extension Extra, ExEx 6021.

Ball, J. and D. Graper, 1993. Planting a balled and burlapped tree. SDSU extension Extra, ExEx 6020.

Ball, J. and D. Graper, 1993. Planting a container tree. SDSU Extension Extra, ExEx 6019.

Ball, J. and D. Graper, 1993. Planting a bare-root tree. SDSU Extension Extra, ExEx 6018.

Ball, J. and D. Graper, 1992. Caring for your real Christmas tree. SDSU Extension Extra, ExEx 6014.

Ball, J. and D. Graper, 1992. Christmas tree selection. SDSU Extension Extra. ExEx 6013.

Ball, J. and D. Graper, 1992. Yellowing and early leaf drop on shade trees. SDSU Extension Extra, ExEx 6010.

Ball, J., M. McLeod, and D. Graper. 1992. Bronze birch borer management in South Dakota, SDSU Extension Extra. ExEx 6008.

McLeod, M., J. Ball, and D. Graper. 1992. Zimmerman pine moth control in South Dakota, SDSU Extension Extra. ExEx 6007.

Kennedy, M. K. and J. Ball. 1981. Bronze birch borer. Mich. State University Ext. Bulletin. E-1445. 4 pp.

Simmons, G., D. Mosher, M. McKeague, J. Nyrop, J. Ball, W. Kemp, J. Cornell and J. Mahar. 1978. Forest insect and disease identification. Mich. State Univ. Coop. Ext. Service and Mich. Dept. of Nat'l Res. Misc. Publ. 20 pp.

Mosher, D., G. Simmons, J. Ball, W. Kemp, M. McKeague and J. Nyrop. 1978. Forest pest identification. Mich. State University Coop. Ext. Service and Mich. Dept. of Nat'l Res. Misc. Publ. 20 pp.

### **Papers Presented**

Ball, J. 2016. The Competitive Relationship between Trees and Turf. Golf Course Superintendents of America Association annual conference. San Diego, CA. February 2016.

Ball, J. 2016. The Z: Standards to Live By. Texas Urban Forestry Conference. San Antonio, TX. July 2016.

Ball, J. 2016. The Need to Diversify Our Community Forests. International Society of Arboriculture Annual Conference, San Antonio, TX. August 2016.

Ball, J. 2016. Arborist Incidents and the Z. Michigan Grounds Conference. Novi, MI. December 2016.

Ball, J. 2015. Trees and turf relationship on golf courses. Golf Course Superintendents of America Association annual conference. San Antonio, TX. February 2015.

Ball, J. 2015. Conifer Diseases and Disorders on the Northern Plains. Plant Health Care Conference. Fort Collins, CO. June 2015.

Ball, J. 2015. Arborist Nonfatal Injuries and Implications for First Aid Training. International Society of Arboriculture Annual Conference, Orlando, FL. August 2015.

Ball, J. 2015. Arborist Fatal and Nonfatal Incidents and Application of the Z. Tree Care Industry Expo. Pittsburgh, PA, November 2015.

Ball, J. 2014. Trees and turf relationship on golf courses. Golf Course Superintendents of America Association annual conference. Orlando, FL. February 2014.

Ball, J. 2014. Tree Diversity in the Urban Forest. North Coast Urban Forestry Conference. Kent, OH. March 2014.

Ball, J. 2014. The threat of exotic stressors and tree species diversity in community forests. International Society of Arboriculture annual conference, Milwaukee, WI. August 2014.

Ball, J. 2014. Support systems and dynamic loading in trees. Tree Care Industry Expo. Hartford, CT. November 2014.

Ball, J. Arborist Climbing Efficiency. Penn-Del International Society of Arboriculture Conference. Lancaster, PA. February 2013.

Ball, J. The Emerald Ash Borer in China. International Society of Arboriculture Midwestern Chapter Conference. St. Louis, MO. February 2013.

Ball, J. The Need for Species Diversity. Longwood Gardening Symposium. Longwood Gardens, Kennett Square, PA. February, 2013 (also as a webinar)

Ball, J and A. Carpenter. Arborist Efficiencies and Climbing Systems. International Society of Arboriculture Annual Conference. Toronto, Ontario. August 2013.

Ball, J. Tree Worker Safety. International Society of Arboriculture Kentucky Chapter Conference, Louisville, KY. October 2013.

Ball, J. Emergency Response Needs for Arborists. TCI EXPO. Charlotte, NC.



November 2013.

Ball, J. Common Incidents in Tree Work. Wisconsin Arborist Association Conference. Madison, WI. January 2012.

Ball, J. Branch Loading and Stress. Penn-Del International Society of Arboriculture Conference. Lancaster, PA. February 2012.

Ball, J. Tree Worker Safety. Delaware Urban Forestry Conference, Dover, DE. March 2012.

Ball, J. De-icing Salt Injury and Trees. Minnesota Shade Tree Short Course. St. Paul, MN. March 2012.

Ball, J. The Business of Arboriculture. Southern Chapter, International Society of Arboriculture. Tampa, FL. June 2012.

Ball, J and A. Carpenter. Energy Expenditures for Climbers. International Society of Arboriculture Annual Conference. Portland, OR. August 2012

Ball, J. The Need for Species Diversity. Pacific Northwest Chapter, International Society of Arboriculture Annual Conference, Anchorage, AK. October 2012.

Ball, J. Emergency Response Needs for Arborists. TCI EXPO. Baltimore, MD. November 2012.

Ball, J. The Anatomy of a Murder. Iowa Shade Tree Short Course. Ames, IA. February 2009.

Ball, J. The Basics of Aerial Rescue. Ohio Tree Care Conference. Columbus, OH. February 2009.

Ball, J. and R. Gaussoin. Golf Course Trees and Turf: a Peaceful Coexistence. Golf Course Superintendents of America Annual Conference. New Orleans, LA. February 2009.

Ball, J. Where does Forestry end and Urban Forestry Begin? Department of Transportation Workshop. Washington, D.C. June 2009.

Ball, J. International Safety Survey. International Society of Arboriculture Annual Conference. Providence, RI. August 2009

Ball, J. and D. Marion. Diagnosing Problems on Mature Trees. International Society of Arboriculture Annual Conference. Providence, RI. August 2009.

Ball, J. Arboricultural Safety. TCI EXPO. Baltimore, MD. November 2009.

Ball, J. and D. Blair. Arboricultural Safety and your Business. Long Island Arborist Association Conference. Farmingdale, NY. February 2008.

Ball, J. The 4 P's of Professionalism. Ohio Tree Care Conference. Columbus, OH. February 2008.

Ball, J. and R. Gaussoin. Golf Course Trees and Turf: a Peaceful Coexistence. Golf Course Superintendents of America Annual Conference. Orlando, FL. February 2008.

Ball, J. Where does Forestry end and Urban Forestry Begin? Conference of the Northeastern Urban and Community Foresters. Traverse City, MI. May 2008.

Ball, J. and D. Marion. Caring for the Mature Tree. Tree Academy Workshop. International Society of Arboriculture Annual Conference. St. Louis. MO. August 2008.

Ball, J. Less is More. Professional Tree Care Association of San Diego. San Diego, CA. August 2008.

Ball, J. Arboricultural Safety. TCI EXPO. Milwaukee, WI. November 2008.

Ball, J. Static and Dynamic Loading in Trees. International Society of Arboriculture Conference. Hong Kong, PR China. November 2008.

Ball, J. The Conflict between Trees and Turf. Minnesota Green Expo. Minneapolis, MN. January 2007.

Ball, J. Tree Response to Thinning. Nebraska Arborist Association Conference. Omaha, NE. January 2007.

Ball, J. Marketing Green Industry Services. Mid-American Horticultural Trade Show. Chicago, IL. January 2007.

Ball, J. Tree Worker Safety. Think Trees New Mexico. Albuquerque, NM. January 2007.

Ball, J. and D. Blair. Advanced Tree Support Systems. Mid-Atlantic Horticulture Short Course. Virginia Beach, VA. January 2007

Ball, J. and D. Blair. Arboricultural Safety in Your Business. Mid-Atlantic Horticulture Short Course. Virginia Beach, VA. January 2007.

Ball, J. Arboricultural Safety. New England Grows. Boston, MA. February 2007.

Ball, J. The 4 P's of Professionalism. Oklahoma Urban Forestry Conference. Tulsa, OK. February 2007.

Ball, J., Green Industry Safety. Illinois Nurseryman Association. Springfield, IL. September 2007.

Ball, J. and D. Blair. Marketing Tree Care Practices. Waynesboro Tree Care Workshop. Waynesboro, VA. September 2007.

Ball, J. Planting Trees on the Northern Plains: How to Improve Performance. University of Montana Green Industry Workshop. Billings, MT. October 2007.

Ball, J. Arboricultural Safety. TCI EXPO. Hartford, CT. November 2007.

Ball, J. A Tale of Two Trees. Mid-American Horticultural Trade Show. Chicago, IL. January 2006.

Ball, J. Planting Trees for Tough Sites. Nebraska Landscape Conference. Omaha, NE. January 2006.

G. Johnson and J. Ball. A Healthy Urban Forest 2056 AD: How Are We Going to Get There? Iowa Shade Tree Short Course. Ames, IA. March 2006.

Ball, J. Arboricultural Safety. Western Chapter, ISA Conference. Los Angeles, CA. April 2006.

Ball, J. Tree Planting: The Foundation of Plant Health Care. Illinois ProHort Conference. Peoria, IL. March 2006.

Ball, J., D. Marion and J. Lloyd. Diagnosing Declines in Mature Tree. Tree Academy Workshop. International Society of Arboriculture Conference. Minneapolis, MN. August 2006.

Ball, J. and J. Lum. Tree Worker Safety. Western Chapter ISA Tree Worker Workshop. Orange County, CA. September 2006.

Ball, J. Arboricultural Safety. TCI Expo. Baltimore, MD. November 2006.

Ball, J. Extended Warranties for the Design/Build Industry. National Landscape Association Winter Management Conference. Louisville, KY. February 2005.

Ball, J. and S. Vosberg. Arboricultural Safety. Rocky Mountain Chapter, ISA

workshop. Denver, CO. March 2005.

Ball, J. Tree Planting: The Foundation of Plant Health Care. Midwest Gardening Symposium. Morton Arboretum. Chicago, IL. March 2005.

Ball, J, R. Sowers and C. Foss. The Use of Pheromones in Population Reduction Trapping of the Pine Engraver Beetle (*Ips pini*). Western Forest Insect Conference. Victoria, B.C., Canada. March 2005.

Ball, J. Emergency Response for Tree Workers. International Society of Arboriculture Western Chapter Conference. Phoenix, AZ. April 2005.

Ball, J, S. Mason and A. Kiesz. The Use of Volunteers for Community Tree Inventories. Trees, People and Towns Conference. Cheyenne, WY. June 2005.

Ball, J., D. Marion and J. Lloyd. Managing the Mature Tree. Tree Academy Workshop. International Society of Arboriculture Conference. Memphis, TN. August 2005.

Ball, J. and S. Vosberg. Arboricultural Safety. Rocky Mountain Chapter, ISA workshop. Denver, CO. February 2004.

Ball, J. Tree Defenses – Manage the Tree, Not the Bug. Iowa Shade Tree Short Course. Ames, IA. March 2004.

Ball, J. Tree Pruning – A New Approach. Midwest Gardening Symposium. Morton Arboretum. Chicago, IL. March 2004.

Ball, J. Emergency Response for the 21<sup>st</sup> Century. International Society of Arboriculture Conference. Pittsburgh, PA. August 2004.

Ball, J., D. Marion and J. Lloyd. Diagnosis of Mature Tree Problems. International Society of Arboriculture Conference. Pittsburgh, PA. August 2004.

Ball, J. Arboricultural Safety. Pacific Northwest ISA Chapter Annual Conference. Moscow, ID. September 2004.

Ball, J. Arboricultural Safety. Connecticut Tree Protection Association. Hartford, CT. January 2003.

Ball, J. Marketing Landscape Services. North Dakota Nursery and Landscape Association. Fargo, ND. January 2003.

Ball, J. Planting Myth. Chicago Botanic Garden. Chicago, IL. February 2003.

Ball, J. Tree Planting – A New Approach. Midwest Gardening Symposium. Morton Arboretum. Chicago, IL. March 2003.

Ball, J. and K. Coder. Tree Care in the Deep South. Jefferson Tree Board. New Orleans, LA. April 2003.

Ball, J. and J. Lloyd. Root Management: Implications for Plant Health Care. International Society of Arboriculture Conference. Montreal, Quebec, Canada. August 2003.

Ball, J. What Accidents Occur and Why? International Society of Arboriculture Conference. Montreal, Quebec, Canada. August 2003.

Ball, J. Arboricultural Safety. Pacific Northwest ISA Chapter Annual Conference. Sun River, OR. October 2003.

Ball, J. Marketing Tree Care Service. New York Turf Association Conference. Rochester, NY. November 2003.

Ball, J. and A. Jones. Planting Techniques – A New Approach. Mid-Atlantic Chapter, International Society of Arboriculture. Norfolk, VA. October 2002.

Ball, J. The Influence of Urban Development on Forest Structure and Composition. 3<sup>rd</sup> Symposium on Social Forestry. Beijing, P.R. China. October 2002.

Ball, J. and J. Lloyd. Canopy Management: Implications for Plant Health Care. International Society of Arboriculture conference. Seattle, WA. August 2002.

Ball, J and A. Wiechmann. Emergency Response: A New Look. 5<sup>th</sup> European Congress. Oslo, Norway. June 2002.

Ball, J. The Ethics of Arboriculture. Midwestern Chapter, International Society of Arboriculture. Kansas City, KS. February 2002.

Ball, J. The Tale of Two Trees: Contrasting the Lives of a Forest and Urban Tree. Landscaping Forum, Morton Arboretum. Chicago, IL. February 2002.

Ball, J. The Competitive Relationship Between Trees and Turf. Wisconsin Turfgrass Association. Madison WI. January 2002.

Ball, J. Transplanting Large Trees. Montana Nursery and Landscape Association. Missoula, MT. January 2002.

Ball, J. How We Kill Trees. North Dakota Nursery and Landscape Association. Fargo, ND. January 2002.

Ball, J. Trees and Turf: Unnatural Neighbors. Colorado Turfgrass Conference. Denver, CO. December, 2001.

Ball, J. Managing Golf Course Trees. Saskatoon Golf Course Superintendent Association. Saskatoon, SA. December, 2001.

Ball, J. Trees and People: An Example of a Symbiotic Relationship. Society of Municipal Arborist. Fargo, ND. October, 2001.

Ball, J. IPM: A Marketing Approach. TCI Conference. Columbus, OH. October, 2001.

Ball, J. Tree Care Practices: Changing for the New Millenium. Okaloma Tree Conference, Okalomoa City, OK. October, 2001.

Ball, J. Arboricultural Safety. Prairie Chapter, International Society of Arboriculture. Winnipeg, MB. September, 2001.

Ball, J., J. Lloyd and D. Marion. Managing the Whole Tree. Tree Academy Workshop. International Society of Arboriculture Annual Conference. Milwaukee, WI. August, 2001.

Ball, J. Integrated Pest Management for Arborist. Iowa Arborist Association. Ames, IA. July, 2001.

Ball, J. and J. Clark. Tree-Risk Management. Florida Arborist Association. Tampa, Fl. June 2001.

Ball, J. A Tale of Two Trees. Iowa Shade Tree Short-Course. Iowa State University, Ames IA. March, 2001.

Ball, J. Planting Design Problems. Chicago Botanic Garden Symposium. Chicago, IL. February, 2001.

Ball, J. A History of Tree Care. Missouri Forestry Association Conference. St. Louis, MO. February, 2001.

Ball, J. and T. Dunlap. Climbing Safety. Louisiana Arborist Association Conference. Baton Rouge, LA. January, 2001.

Ball, J. Marketing Tree Care Services. Wisconsin Arborist Association Conference. Green Bay, WI. January, 2001.

- Ball, J. Transplanting Techniques for Large Trees: A Case Study. Nebraska Arborist Association Conference. Omaha, NE. January, 2001.
- Ball, J. The Competitive Relationship Between Trees and Turf. Idaho Arborist Association Conference. Boise, ID. January, 2001.
- Ball, J. Aerial Rescue. Louisiana Arborist Association Conference. Baton Rouge, LA. September, 2000.
- Ball, J. Diagnostics for Arborists. International Society of Arboriculture Conference. Baltimore, MD. August, 2000.
- Ball, J. A Short History of Tree Care. Small Community Forestry Conference. Dickenson, ND. July, 2000.
- Ball, J. Marketing IPM. San Francisco Bay Environmental Authority. San Francisco, CA. June, 2000.
- Ball, J. Utility Tree Management. Right-of-Way Conference. Mountgomery, AL. April, 2000.
- Ball, J. A Short History of Arboriculture – Y1K to Y2K. Iowa State Shade Tree Short Course. Ames, IA. March, 2000.
- Ball, J. The Feature Tree. Chicago Botanical Garden Symposium. Chicago, IL. February, 2000.
- Ball, J. The Relationship Between Trees and Turf. New York Golf Course Superintendents Conference. Rye, NY. January, 2000.
- Ball, J. Plant Health Care. Wyoming Groundskeepers Winter Conference. Cheyenne, WY. January, 2000.
- Ball, J. Tree Worker Safety. Think Trees – New Mexico. Santa Fe, NM. January, 2000.
- Ball, J. Plant Health Care for Arborists. Kansas Arborist Association. Wichita, KS. January, 2000.
- Ball, J. and S. Lilly. Marketing Tree Care Programs to Golf Courses. Minnesota Turf and Grounds Conference. Minneapolis, MN. December, 1999.
- Ball, J. The Influence of Trees on Turf. Manitoba Golf Course Superintendents Conference. Winnipeg, MB. November, 1999.

Ball, J. and T. Konda. Cobra: an Alternative Tree Support System. TCI Conference. Indianapolis, IN. October, 1999.

Ball, J. Managing the Feature Tree. International Society of Arboriculture 75<sup>th</sup> Conference, Stamford, CT. August, 1999.

Ball, J. and S. Lily. Golf Course Tree Management. International Golf Course Superintendents Conference. Orlando, FL. February, 1999.

Ball, J. Plant Health Care for Urban Forestry. Think Trees New Mexico, Sante Fe, NM, January, 1999.

Ball, J. Tree Planting Techniques. Indiana Urban Forestry Conference. Bloomington, IN. October, 1998.

Ball, J. Tree Planting Techniques. Virginia Shade Tree Conference. Charlottesville, VA. September, 1998.

Ball, J. Tree Biology for Planners. Arbor Day Building with Trees Conference. Nebraska City, NE. March, 1998.

Ball, J. and J. Lloyd. Plant Health Care: the Process. Minnesota Shade Tree Short Course, St. Paul, MN. March, 1998.

Ball, J. and K. Coder. The Turf/Tree Competitive Relationship. International Golf Course Superintendents Conference. Los Angeles, CA. February, 1998.

Ball, J. Large Tree Transplanting Techniques. Wisconsin Arborist Association Conference. Appleton, WI. January, 1998.

Ball, J. The Tree-Turf Relationship. Nebraska Turf Conference. Omaha, NE. January, 1998.

Ball, J. What Does Our Client Want: Marketing for Arborist. Bartlett Tree Expert International Sales Meeting. Hartford, CT. December, 1997.

Ball, J. Trees and People: The Perfect Example of a Symbiotic Relationship. Nebraska Community Forestry Conference. Grand Island, NE. November, 1997.

Ball, J. Restoration of Bottomland Forests: Challenges and Opportunities. North Dakota Academy of Science. Grand Forks, ND. September, 1997.

Ball, J. Managing Riparian Forests in Urban Communities. North Dakota Urban and Community Forestry Conference. September, 1997.



Ball, J. and J. Lloyd. Plant Health Care and the Diagnostic Process. International Society of Arboriculture Annual Conference. Salt Lake City, UT. August, 1997.

Ball, J. Diagnosing Common Tree Problems. Iowa Arborist Association Summer Workshop. Drake University, Des Moines, IA. July, 1997.

Ball, J. Plant Health Care and Relation Selling. Bartlett Tree Experts International Conference. Charlotte, NC. October, 1995.

Ball, J. Utility Tree Pruning Techniques for the 21st Century. Prairie Chapter, International Society of Arboriculture, Annual Conference. Weyburn Saskatchewan. October, 1995.

Ball, J. Sustaining Mature Trees. Iowa Shade Tree Short Course. Ames, IA. March, 1995.

Ball, J. The Business of Plant Health Care. National Landscape Association Management Conference. Louisville, KY. February, 1995.

Ball, J. Hazard Tree Management. Midwestern Chapter, International Society of Arboriculture Conference. Lawrence, KS. February, 1995.

Ball, J. and M. Stennes. Understanding the Below-Ground Tree. Tree Health Conference. Minneapolis, MN. January, 1995.

Ball, J. Plant Health Care. Prairie Chapter, International Society of Arboriculture Conference. Portage la Prairie, MB, Canada. September, 1994.

Ball, J. Plant Health Care and the Public. Midwestern Chapter, International Society of Arboriculture Conference. St. Louis, MO. January, 1994.

Ball, J. Tools of the Plant Health Care Trade. International Society of Arboriculture Conference. Bismarck, ND. August, 1993.

Ball, J. Plant Health Care and the Public. Shade Tree Short Course, University of Minnesota. St. Paul, MN. March, 1993.

Ball, J. Diagnostic Techniques for Plant Health Care. Plant Health Care Symposium, University of Michigan. Ann Arbor. January, 1993.

Ball, J. Tree Hazard Management. Illinois Arborist Association Annual Meeting. Decatur, Illinois. December, 1992.

Ball, J. Understanding the Generic Tree: Another Piece of the Puzzle. Minnesota

- Society of Arboriculture Annual Fall Conference. Rochester, Minnesota. September, 1992.
- Ball, J. Species Specific Tree Care. Society of Municipal Arborists Annual Conference. Aberdeen, South Dakota. September, 1992.
- Ball, J. Exposing the Generic Tree. Understanding the Urban Tree Symposium. St. Louis Park, Minnesota. January, 1992.
- Ball, J. Marketing for Private Tree Services. Prairie Communities & Trees: Grand and Growing. Minnesota Society of Arboriculture Conference. Fargo, North Dakota. September, 1991.
- Ball, J. PHC Monitoring Programs. National Arborist Association Plant Health Care Symposium. Danvers, Massachusetts. January, 1991.
- Ball, J. Guidelines for Establishing Monitoring Routines for a Landscape IPM Service. AREA poster session. International Society of Arboriculture Conference. Toronto, Ontario, Canada. August, 1990.
- Ball, J. The Importance of Monitoring in an IPM program. National Arborist Association Plant Health Care Symposium. Danvers, Massachusetts. February, 1990.
- Ball, J. Measuring Tree Vitality. Massachusetts Horticulture Congress. Boston, Massachusetts. January, 1989.
- Ball, J. IPM -- Is It For You and Your Customers? Midwest Chapter, International Society of Arboriculture. Minneapolis, Minnesota. January, 1987.
- Ball, J. Simulation Modeling. Minnesota Nurseryman's Association Computer Meeting. Minnesota Landscape Arboretum. Chanhassen, Minnesota. August, 1986.
- Ball, J. Do Mature Trees Need Attention? Minnesota Nurseryman's Association Arboretum Day. Minnesota Landscape Arboretum. Chanhassen, Minnesota. June, 1986.
- Ball, J. The Development of a Nursery Simulation Game. NACTA Meeting. Ridgetown College of Agricultural Technology. Ridgetown, Ontario. June, 1986.
- Ball, J. Urban Trees for Minnesota. Horticulture Industries Conference. St. Paul, Minnesota. January, 1986.
- Ball, J. Tree Climbing Safety. Fall Conference. Minnesota Society of

Arboriculture. Chanhassen, Minnesota. September, 1985.

Ball, J. and S. Fox. Arboriculture Video Production. Fall Conference Minnesota Society of Arboriculture, Chanhassen, Minnesota. September, 1985.

Ball, J. Guidelines for Using Homeowner's Trees in Urban Research. International Union of Forest Research Organizations. Michigan Technological University. Houghton, Michigan. August, 1985.

Ball, J. Public Perception of IPM. Midwestern Chapter, International Society of Arboriculture. Omaha, Nebraska. February, 1985.

Ball, J. Incorporating IPM into Commercial Practices. Horticulture Industries Conference. St. Paul, Minnesota. January, 1985.

Ball, J. Horticultural Information Needs of Rural People. Midwestern Rural Library Conference. Mankato, Minnesota. October, 1984.

Ball, J. Climbing Techniques. Urban/Community Forestry Conference. Minnesota Society of Arboriculture. Minnesota Landscape Arboretum. Chanhassen, Minnesota. September, 1984.

Ball, J. The Role of the University in Urban Forestry. Urban/Community Forestry Conference. Minnesota Society of Arboriculture. Minnesota Landscape Arboretum. Chanhassen, Minnesota. September, 1984.

Ball, J. Managing Birch Dieback. Michigan Entomology Conference. Richland, Michigan. June, 1984.

Ball, J. and G. Simmons. The Use of X-Rays for Detecting Phloem Feeding Insects. North Central Branch Meeting, Ent. Soc. of Amer. Wooster, Ohio. March, 1981.

Simmons, G. and J. Ball. The Bronze Birch Borer. Soc. Amer. Foresters, Wisc-Mich. Sec., Marquette, Michigan. September, 1980.

Ball, J. and G. Simmons. The Bronze Birch Borer and Birch Dieback. North Central Branch Meeting, Ent. Soc. of Amer. Lincoln, Nebraska. March, 1980.

Ball, J. and G. Simmons. Species Selection for the Urban Environment. Mich. Acad. Sci. Ann Arbor, Michigan. March, 1978.

### **Contributing Papers**

Ball, J. and J. Jennings. Cultural Attitudes Toward Selected Tree Characteristics

and Design. 7th National Urban Forestry Conference. New York, NY. September 1995.

## **Editor**

Forest Operations for Sustainable Forests and Healthy Economies. Proceedings for the Council on Forest Engineering 1997 Conference. South Dakota State University Misc. Publication.

## **Grants Received**

Ball, J. USDA Forest Service. *Mountain Pine Beetle Management Tactics vs. the Do-Northing Alternative: An Analysis of Success*. \$64,000 (9/16 – present)

Lind-Thielke, C. and J. Ball. 2016. TREE Fund. *Development of a Junior Arborist Program*. \$5,000 (8/16 – 10/16)

Ball, J and G. Carlson. 2014. USDA Forest Service. *The development and production of video series on urban loggings*. \$42,000 (6/1/14 – 9/30/16)

Ball, J. 2012. Create and product two videos, one on electrical hazard recognition and a second on aerial rescue for the Tree Care Industry Association. TCIA \$19,000 (2/15/12-2/30/14)

Ball, J and J. Moening. 2010. Evaluating the performance of arborists utilizing a wood chipper. Bandit Inc. \$23,000 (11/23/10 – 6/15/11)

Ball, J, S. Burckhard, J. Doolittle, D. Malo and H. Woodard. 2006. The Assessment of Chloride Injury deom De-Icing Salts in Trees along State Highways in the Black Hills. South Dakota Department of Transportation and the Mountain-Plains Consortium \$96,250 (6/1/06 – 9/10/10).

Ball, J and L. Browning. 2002. The distribution of weight in the canopy of deciduous trees: implications for crown thinning and tree support systems. TREE fund, International Society of Arboriculture. \$17,520 (9/30/02 – 9/30/04).

Ball, J and A. Wiechmann. 2001. A study of current aerial rescue practices in the United States. Hyland R. Johns Grant, International Society of Arboriculture. \$5000 (9/1/01-6/30/04).

Henderson, B. and J. Ball. 2001. Green Industry Safety Training for Minorities. OSHA Training Grant. \$245,000. This grant was administrated by the Forest Industry Safety Training Alliance in Rhinelander, Wisconsin (1/1/01-12/30/06)

Ball, J., B. Coburn and G. Josten. 1997. A Proposal to Fund a Media and

Landowner Workshop and Tour of Tree Farms. American Forest Foundation. \$2,500 (7/1/97-6/31/98).

Ball, J. and D. Gilbertson. 1997. The Influence of Urban Fringe Forests and Forest Islands on the Development of Urban Communities. USDA Forest Service Challenge Grant Program. \$21,700 (8/1/97-10/31/00).

Ball, J. 1994. A Comparison of the Benefits and Costs of Tree Cover between Two Prairie Communities. USDA Forest Service Challenge Grant Program. \$25,000 (8/1/94-10/31/96).

Ball, J., P. Schaefer, and G. Josten. 1993. The Development of a Logger Education Program in the Black Hills of South Dakota. USDA Cooperative Extension Service. \$17,000 (4/15/93-6/20/95).

Fennell, A., J. Ball, and D. Graper. 1992. South Dakota State University New Ideas Fund, \$2,500.

Ball, J. and L. Tix. 1987. Structural Changes in Tree Canopies due to Topping. University of Minnesota Undergraduate Research Opportunities Program. \$900.

Ball, J. and T. Guggiesberg. 1986. Determining Key Pests and Plants for a Minnesota Integrated Pest Management Program. University of Minnesota Undergraduate Research Opportunities Program. \$900.

Ball, J. 1984. Development, Validation and Implementation of a Nursery Simulation Game. University of Minnesota Educational Development Program. \$1,200.

Ball, J. 1984. Incorporating Integrated Pest Management into Commercial Arborist Practices. International Society of Arboriculture. \$1,000.

Simmons, G. A. and J. Ball. 1981. Environmental Mediation of the White Birch/Bronze Birch Borer Interaction. International Society of Arboriculture. \$1,000.

### **Professional associations**

A300 Z.133 Safety Committee, International Society of Arboriculture representative (2010 – present)

Education and Services Committee, International Society of Arboriculture (2001 – present)

Safety Committee, Tree Care Industry Association (2003 – present)

Editorial board, *Arborist News* (2003 – 2007)

Committee member, National Urban and Community Forestry Advisory Council,  
US Forest Service (1999 – 2003)

Executive Board, Student Activity Board, International Society of Arboriculture  
(1999 – 2008)

Editorial board, *Journal of Arboriculture* (1999 – 2002)

Chair, South Dakota Society of American Foresters (1999 – 2000)

Chair, Great Plains Tree Pest Council (1998-1999, 2015-2016)

Education committee, South Dakota Arborist Association (1992 -present)

Executive Board, Midwestern Chapter, International Society of Arboriculture (1993  
–1996, 2010-2013)